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PTO/SB/08A (10-01)

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<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	09/674,090
				Filing Date	March 1, 2001
				First Named Inventor	Yoav Eichen
				Art Unit	1637
				Examiner Name	Jeffrey Siew
Sheet	1	of	3	Attorney Docket Number	18363.0002/P002

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		Number-Kind Code <sup>2</sup> (if known)			
		3,833,894	9-1974	Aviram et al.	
		5,063,417	11-1991	Hopfield	
		5,089,545	2-1992	Pol	
		5,561,071	10-1996	Hollenberg et al.	
		5,707,845	1-1998	Ueyama et al.	
		5,946,550	8-1999	Papadimitrakopoulos	
		5,445,934	8-1995	Fodor et al.	
		5,653,939	8-1997	Hollis et al.	
		5,739,308	4-1998	Kandimalla et al.	
		5,770,369	6-1998	Meade et al.	
		5,787,032	7-1998	Heller et al.	
		5,824,473	10-1998	Meade et al.	
		5,837,546	11-1998	Allen et al.	
		5,858,659	1-1999	Sapolsky et al.	
		5,874,046	2-1999	Megerle	
		5,876,976	3-1999	Richards, et al.	
		5,891,630	4-1999	Eggers et al.	
		6,060,023	4-2001	Maracas	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>0</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
		WO 98/53841	12-1998	WIPO		
		WO 99/04440	1-1999	WIPO		
		WO 99/29711	6-1999	WIPO		
		WO 99/35256	7-1999	WIPO		
		WO 99/36573	7-1999	WIPO		

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		Number-Kind Code <sup>2</sup> (if known)			
		6,051,380	4-2000	Sosnowski et al.	
		6,071,699	6-2000	Meade et al.	
		6,093,370	7-2000	Yasuda et al.	
		6,210,880	4-2001	Lyamichev	
		6,399,303	6-2002	Connolly	
		US2002/0182608 A1	12-2002	Connolly	

FOREIGN PATENT DOCUMENTS					
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		WO 93/25003	12/1993	WIPO	
		WO 94/05045	3/1994	WIPO	

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		Chen et al., "Synthesis from DNA of a Molecule With the Connectivity of a Cube," <u>Nature</u> , 350:631-633 (1991)	
		Mirkin et al., "A DNA-Based Method of Rationally Assembling Nanoparticles Into Macroscopic Materials", <u>Nature</u> , 382:607-609 (1996)	
		Alivisatos et al., "Organization of 'Nanocrystal Molecules' Using DNA," <u>Nature</u> , 382:609-11 (1996)	
		Braun et al., "DNA-Templated Assembly and Electrode Attachment of a Conducting Silver Wire," <u>Nature</u> , 391:775-778 (1998)	
		J. L. Coffer et al., "Dictation of the Shape of Mesoscale Semiconductor Nanoparticle Assemblies by Plasmid DNA", <u>Appl. Phys. Lett.</u> 69 (25), December 16, 1996, pp.3851-3853	
		D. B. Hall, et al., "Oxidative DNA Damage Through Long-Range Electron Transfer", <u>NATURE</u> , Vol. 382, August 22, 1996, pp. 731-735	
		S.N. Size, "Physics of Semiconductor Devices, 2nd Ed., pp. 349, 490-495 published 1981	
		Klein et al., "An Approach to Electrical Studies of Single Nanocrystals," <u>Appl. Phys. Lett.</u> , 68 (18):2574-2576 (1996)	
		Sato et al., "Single Electron Transistor Using A Molecularly Linked Gold Colloidal Particle Chain," <u>J. Appl. Phys.</u> 82 (2) : 696-701 (1997)	



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		Graber et al., "Kinetic Control of Interparticle Spacing in Au Colloid-Based Surfaces: Rational Nanometer-Scale Architecture," J. Am. Chem. Soc., 118:1148-1153 (1996)
		Ackley, et al., "DNA Technology for Optoelectronics", IEEE, April 1998

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/Angela Bertagna/

12/28/2009